M25 JUNCTION 10/A3 WISLEY INTERCHANGE IMPROVEMENT SCHEME

PROPOSED M25 JUNCTION 10/A3 WISLEY INTERCHANGE DEVELOPMENT CONSENT ORDER ("DCO")

ROYAL HORTICULTURAL SOCIETY ("RHS") – REGISTRATION NUMBER 20022900

RESPONSE TO THE SECRETARY OF STATE'S LETTER DATED 4 NOVEMBER 2020

These comments are submitted on behalf of the RHS. Richard Max & Co LLP are the duly appointed solicitors to the RHS and are authorised to submit these comments and other documents on its behalf.

OVERVIEW

1. These comments address matters raised in the Secretary of State's letter dated 4 November 2020 to Highways England; Surrey County Council; Girlguiding Greater London West; Elmbridge Borough Council and other Affected/Interested Parties.

2. The RHS is an Interested Party.

RHS RESPONSE TO QUESTIONS 3 AND 4

3. The RHS response to Question 4 is set out in **Appendix 1**. It is the RHS's position that, on both legal and policy grounds, the reduction in the amount of the Replacement Land must prevent the DCO from being granted by the Secretary of State.

RHS RESPONSE TO QUESTION 7

4. The RHS wishes to respond to a number of matters raised in **REP12-024**.

Highways and traffic impacts

5. At para 2.2.1 of REP12-024 HE states that the RHS has transposed some cell values (between M25 clockwise and anti-clockwise) in the tables for the AM and PM peak Journey Time comparisons. The Inter-Peak is

unaffected. This is correct, but it makes no difference to the conclusions previously reached by the RHS.

6. We attach an update to the Note (REP11-034A) (**Appendix 2**) which refers to the updated journey time comparisons tables (REP11-036A) (**Appendix 3**). The Rev A update of REP11-034 has been marked as tracked edits in order to assist the Secretary of State.

7. This reinforces the conclusion reached by the RHS (which HE's REP12-024 does not seek to challenge) (see para 2.14 of REP11-034A) that irrespective of whichever data set is used and irrespective of which time period, the RHS Alternative Scheme results in journey times which are significantly improved against the DCO Scheme, whether the signed or modelled route.

Air quality and ecology

8. The RHS is responding to the matters relating to air quality and ecology in REP12-024 to make clear that the points made by Highways England do not negate the evidence submitted by the RHS. Please see attached air quality and ecology Responses to REP12-024 (**Appendix 4**).

Heritage impacts (including direct financial Impact)

9. The RHS refers the Secretary of State to its detailed expert submission on heritage matters, made at REP11-047.

10. The RHS has provided evidence on the economic impact it would suffer, contrary to the HE's assertion of no such impact arising. Such impacts affect all areas of the grade II* Registered Park and Garden, including those which are devoted to display.

11. The response does not answer a main finding of the Montagu Evans report. They identified a request for Historic England for information on the proposals' financial impacts on the RHS. Such information was never supplied.

12. The RHS does not accept that the RHS Garden's location near to a major road indicates that there is no value to the rural aspects of its setting. Tranquility and peaceful contemplation of plants is plainly assisted by a

rural setting. Additionally, the response from Applicant is missing the change in character of the approach, consequent on the overbridge, does not fairly affect the criticisms made in the Montagu Evans report. These are that the rural character of the approach – whatever its historical pedigree – contribute positively to the experience of approaching the gardens. The arrival facilities are attractively landscaped and screened and integrated with the design of the asset and its purpose. Such facilities are an accepted part of any heritage site's access, and so perceived differently to heavily engineered road approaches.

13. Additionally, and as a matter of fact, neither the landscape nor heritage chapters of the ES have assessed the change to the setting of the RPG arising from the new vehicle approach.

14. It is clear that both types of impact – financial and setting – are relevant in policy terms, and neither significant effect has been properly considered in the relevant parts of the ES.

Arboricultural matters

15. The RHS has no further comments to make on arboricultural matters referred to in REP12-024 and relies on the later provisions in the Land and Works Agreement.

CONCLUSIONS

16. The RHS reiterates its view that the DCO Scheme will cause harm to RHS Wisley and that it would be unlawful for the Secretary of State to confirm it.

Richard Max & Co LLP for and on behalf of the RHS

19 November 2020

FREETHS

RHS' SUBMISSIONS
IN RESPONSE TO
QUESTION 4 OF THE DEPARTMENT FOR TRANSPORT'S LETTER
DATED 4 NOVEMBER 2020

QUESTION 4: IMPACTS ON BIODIVERSITY DUE TO REDUCTIONS IN REPLACEMENT LAND

1. Background

1.1. The Secretary of State is seeking views on the proposed removal of 23.4Ha of Replacement Land from the DCO Scheme. This amounts to 59%% of the 39.8Ha of Replacement Land that was in the original DCO.

1.2. The Replacement Land is primarily required to compensate for the loss of Special Category Land, including common land, open space and open public access land, which would result from the DCO Scheme.

1.3. However, the Applicant has also promoted the function of the Replacement Land in mitigating the ecological effects of the DCO. At paragraph 5.1.5 of the Statement of Reasons Appendix C: Common Land and Open Space Report ("**Statement of Reasons**")[1] it is stated by the Applicant that:

"Replacement Land can also provide many biodiversity benefits, where compatible with public access, including compensation planting for loss of ancient and other woodland and mitigation habitats for loss of SSSI and/or SPA habitats".

1.4. Section 6.2 of the Statement of Reasons, which summarises biodiversity measures associated with the Replacement Land, explains that it is intended to achieve required biodiversity measures *"within the proposed enhancement works to the Replacement Land areas, rather than seek to acquire additional land"*.

1.5. It is now proposed to remove from the DCO Scheme all of Replacement Land parcels HE1, HE2[2], CF1, CF2, CF3 and CF4 and the northern part of parcel PFB3 (reducing PFB3 from 8.4 ha to 2.95ha). The Secretary of State is seeking comments on the effect that the loss of 59% of the Replacement Land will have on biodiversity mitigation and enhancement measures.

1.6. The comments of the RHS on the implications of this reduction on biodiversity are set out below. For the avoidance of doubt, nothing stated here alters any of the submissions already made by the Royal Horticultural Society including, in particular, those in document REP12-056.

2. The Environmental Statement: legal requirements

2.1. The Environmental Statement is produced under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the "**IP (EIA) Regulations**"). Pursuant to Regulation 4, the Secretary of State must not make an order granting development consent unless an Environmental Impact Assessment ("**EIA**") has been carried out.

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[1] REP12-004

[2] The Secretary of State's letter at Q4 refers to HF1 and HF2 but we have concluded that these are typographical errors and that the correct references are HE1 and HE2

2.2. The requirements of the EIA process are set out at Regulation 5. Regulation 5(2) provides that EIA must identify, describe and assess the direct and indirect significant effects of the proposed development on a number of factors including "*biodiversity, with particular attention to species and habitats protected under any law that implemented Directive 92/43/EEC*[3] *and Directive 2009/147/EC*[4]".

2.3. The first step in the EIA process is preparation of an Environmental Statement ("**ES**")[5]. Pursuant to Regulation 14(2), the minimum requirements for the content of an ES include:

2.3.1. a description of the proposed development comprising information on the site, design, size and other relevant features of the development;
2.3.2. a description of the likely significant effects of the proposed development on the environment;
2.3.3. a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment; and
2.3.4. any additional information specified in Schedule 4 relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected.

2.4. Relevant provisions in Schedule 4 to the IP (EIA) Regulations include the following:

2.4.1. The description of the development must include (among other things) a description of physical characteristics of the whole development including land use requirements[6];
2.4.2. The description of likely significant effects on biodiversity should take into account the environmental protection objectives established under the EU Habitats and Birds Directives[7]; and
2.4.3. The description of measures envisaged to avoid, prevent, reduce or offset any significant adverse effects on the environment should explain the extent to which such effects are avoided, prevented, reduced or offset and should cover both the construction and operational phases[8].

2.5. As we demonstrate below, if the listed parcels of Replacement Land are removed from the DCO Scheme, the existing ES will not comply with the minimum requirements of the IP (EIA) Regulations, as it will no longer include accurate, up to date information on the matters summarised at paragraphs 2.3 and 2.4 above.

2.6. The second and third steps in the EIA process, as set out at Regulation 5 are, respectively:

2.6.1. the carrying out of any consultation, publication and notification as required under the IP (EIA) Regulations; and
2.6.2. completion of steps required to be undertaken by the Secretary of State under Regulation 21.

[3] The "Habitats Directive"
[4] The "Birds Directive"
[5] Regulation 5(1)(a)
[6] Schedule 4 paragraph 1
[7] Schedule 4 paragraph 5
[8] Schedule 5 paragraph 7

2.7. Regulation 21 provides that, when deciding whether to grant development consent, the Secretary of State must examine the environmental information and reach a reasoned conclusion on the significant effects of the proposed development on the environment. Regulation 21(2) expressly provides that the Secretary of State's reasoned conclusion *"must be up to date at the time that the decision as to whether the order is to be granted is taken*".

2.8. As explained in detail below, enhancement of the Replacement Land is a central tenet of the mitigation and compensation measures upon which the ecological assessment in the Environmental Statement relies. If Replacement Land is removed from the DCO Scheme as proposed, the Environmental Statement becomes inaccurate and out of date. It follows that the Secretary of State cannot reach a properly reasoned or up to date conclusion as to the significant effects of the DCO Scheme on the basis of the existing Environmental Statement.

2.9. Regulation 20 sets out the process to be followed where an Examining Authority is examining an application for a DCO and the ES is inadequate. In summary, consideration of the application must be suspended and a period of not less than 30 days allowed for representations after further environmental information has been received and publicity requirements complied with. In this case, though, the examination has been formally closed and cannot be re-opened. Therefore, it would be necessary for the Secretary of State to abandon the current DCO application and start again, with a new ES properly reflecting the amended DCO Scheme.

3. The Environmental Statement: consequences of removing 59% of Replacement Land

3.1. The principle of the Replacement Land in the ecological mitigation is set out at paragraph 7.4.5 of the Environmental Statement (Chapter 7: Biodiversity)[9] where it is stated:

"As well as fulfilling the requirement to compensate for the loss of common land, open space and open public access land, the replacement land also provides scope for the provision of mitigation or compensatory habitats for land lost from ecological designations, where this is compatible with the works required to make the land equally advantageous to the public".

3.2. The enhancement of the Replacement Land is a central plank of the mitigation and compensation measures upon which the ecological assessment in the ES relies. The ES explains, at paragraph 7.10.2 of Chapter 7, that the creation and enhancement measures within the Replacement Land are embedded within the DCO Scheme design, form part of the DCO Scheme and have been taken into account in the assessment. The measures relate to mitigation for loss of habitat, impacts on species, loss of areas of designated sites, loss of woodland and mitigation for potential recreational impacts on the Thames Basin Heaths SPA.

3.3. The Replacement Land enhancements are interwoven into many aspects of the embedded mitigation for biodiversity loss. So much so that it is impossible properly to unpick *all* of the effects of the proposed removal of the Replacement Land compartments. On that basis alone, removal of the Replacement Land renders the existing ES out of date and inadequate for the purposes of a proper, reasoned assessment of significant effects on biodiversity.

[9] APP 052

3.4. Nonetheless, it is possible to identify a number of key aspects of the ecological assessment which rely on the Replacement Land and which will be directly impacted by removal of the listed parcels from the DCO Scheme. The following is not an exhaustive list but highlights how much reliance the ES places on the enhancement of the Replacement Land to mitigate the effects of the DCO Scheme.

Loss of woodland enhancements/compensation, including ancient woodland

3.5. Paragraph 7.4.7 explains that native tree and shrub planting within the Replacement Land will provide compensation for the loss of existing woodland required for the construction of the DCO Scheme and *"will be a major contributor to the overall outcome of limited woodland loss for the Scheme"*.

3.6. Paragraphs 7.4.4 to 7.4.10, together, demonstrate that this compensation scheme relies on all of the Replacement Land parcels, including each of those that are proposed for removal from the DCO Scheme. Replacement Land CF1 – CF4 together provide for 14.5ha of woodland management and 0.5ha of replanting, HE1 provides for 1.2 ha of native species woodland planting, to create habitat variety and connection to adjacent woods and HE2 provides 0.5 ha of native species wood and hedgerow planting to create a variety of habitat types. The northern part of PBF3 contains ancient woodland that is to be managed for the enhancement of biodiversity and it is this part of PBF3 that is proposed to be removed from the DCO Scheme.

3.7. Table 7.7 concludes that impacts on Habitats of Principal Importance, which includes lowland deciduous woodland and wood pasture[10], will be *"long term beneficial*" as a result of the SPA suite of compensatory measures and Replacement Land.

3.8. The loss of ancient woodland, specifically, associated with the DCO Scheme is compensated for by the proposed enhancement of Replacement Land. By way of example, the ES states at paragraph 7.4.1 that, "*There will also be enhancement of existing ancient woodland of 4.2 hectares at the former Chatley Farm"* (Chatley Farm is made up of parcels CF1-CF4 which are now proposed to be lost), while paragraph 7.8.17 refers to two parcels of ancient woodland at "the Bogs", which is Replacement Land CF4 (which is proposed to be lost). In Table 7.7, which considers the potential impacts of the DCO Scheme on nature conservation resources, enhancement works to this area is mentioned as a balancing factor for the loss of ancient woodland where it is stated (p80) "*During construction of the Scheme there will be the removal of rhododendron from within 6.1 ha of ancient woodland habitat at Chatley Farm, enabling a more diverse woodland to establish in the long term".* Similarly, the compensation that was to be provided through management of ancient woodland in the northern part of PBF3 will be lost.

3.9. Appendix 7.20 to the ES comprises a Landscape and Ecology Management and Monitoring Plan ("**LEMP**"). Consistent with the body of Chapter 7 to the ES, section 7.3 of the LEMP discusses woodland creation (at HE1, HE2, CF2 and PBF1-3) and section 7.5 of the LEMP discusses woodland enhancement (at PBF3 and CF1-4). All of those enhancements will be lost if the Replacement Land parcels are removed from the DCO Scheme.

3.10. Section 7.4 of the LEMP discusses ancient woodland and soil translocation. Soil is to be translocated from areas of ancient woodland that are lost as a result of the DCO Scheme. The soil is to be placed in an area of PBF2, which is not proposed to be

[10] See table 7.5, bottom of page 62/top of page 63

removed from the DCO Scheme. However, one of the benefits associated with PBF2 will be lost if the northern part of PBF3 is removed from the DCO Scheme. The LEMP states, in section 7.4, that "*There is an existing area of woodland in PBF3 which is adjacent to PBF2. The translocated ancient woodland soil will be placed in an area of PBF2 where woodland creation is planned ... and this should link up to the area of existing ancient woodland (where woodland enhancements are proposed)"*.

Loss of enhancements/mitigation relating to associated habitats

3.11. Paragraph 7.7.5.1 of the LEMP addresses pond enhancements at Chatley Wood Pond. It states that the pond is situated within Replacement Land CF1, where woodland enhancement work will be carried out over 15 years. The LEMP states that *"by association, the pond edge will be managed/monitored for the same length of time".* The pond enhancements are referenced, at paragraph 7.4.43 of Chapter 7 of the ES and in Table 7.7 on page 86, as embedded design features included to mitigate for effects on ephemeral ditch systems and their riparian corridors. Again, this element of mitigation will be lost if CF1 is removed from the DCO Scheme.

Impacts on the Thames Basin Heaths SPA (Ockham and Wisley Commons SSSI)

3.12. The ES identifies, in Table 7.9, cumulative effects that are likely to arise from the DCO Scheme in combination with other existing or approved projects. An assessment of cumulative effects is a statutory requirement of the EIA process[11].

3.13. The Table 7.9 refers to the Replacement Land enhancement including provision of routes for 'non-motorised users' ("**NMU**") when considering cumulative effects associated with a number of other projects. By way of example, when considering cumulative effects arising from residential development at Wisley Airfield, Table 7.9 records the conclusion that *"The Scheme will not improve user access to the SPA/SSSI/LNR and will provide new NMU routes and replacement land outside the designated areas. Therefore, both projects will not increase, and possibly even reduce recreational pressure, and there will be no in combination impact*"[12]. Similar conclusions (of no increase in recreational pressure) are reached in respect of the potential for cumulative effects with land at Garlick's Arch (Table 7.9, page 160), Painshill Farm (page 161), land surrounding West Hall (pages 162 – 163), Broadoaks (page 163) and Byfleet Road (page 164).

3.14. The relevance of the Replacement Land for mitigating against recreational purposes is consistent with the LEMP which records management objectives for Replacement Land parcel PFB3 as including "*facilitate public access*" and for parcels CF1 – CF4 as "*improve public access*".

3.15. Recreational impact is explored further below with reference to the Habitats Regulations Assessment legal requirements. For the purposes of the ES, though, it can be concluded that the cumulative impact assessment is not robust and will have to be reconsidered if 59% of the Replacement Land, on which it relies, is removed from the DCO Scheme.

3.16. Recreational impact and effects on the Thames Basin Heaths SPA is particularly significant for two reasons: (i) given the requirement in Regulation 5 for the EIA to give particular attention to species and habitats protected under the Habitats

[11] IP (EIA) Regulations, Schedule 4 paragraph 5(e)
[12] Table 7.9 page 158 - 159

Regulations; and (ii) given the requirement in Schedule 4 for the description of likely significant effects on biodiversity in the ES to take into account the environmental protection objectives established under the EU Habitats and Birds Directives.

3.17. With reference to Ockham and Wisley Commons SSSI, the assessment in Table 7.8 also relies on measures within the Replacement Land to balance the loss of habitat in the SSSI stating '*With further measures adjacent to the SSSI to include creation of 2.3 ha of wood pasture; planting of 9.8 ha of woodland and enhancement of 20.2 ha of woodland at Chatley Wood, Park Barn Farm and Hatchford End; creation of 5.8 ha of acid grassland/heathland. Although the SSSI will be reduced by 11.5 ha, the suite of compensatory measures provided will result in the retained habitats being in better condition to compensate for this loss, with an increase of 22.5 ha of heathland which is the main habitat for which the SSSI is designated"*. Again, a significant element of this compensation will be lost if Replacement Land parcels CF1-4, HE1 and 2 and part of PFB3 is removed from the DCO Scheme.

Impacts on individual species.

3.18. Reference to the Replacement Land enhancement as mitigation or compensation in respect of impacts on individual species peppers the biodiversity chapter of the ES. There are specific mentions for Spotted Fly Catcher, breeding birds, reptiles and bats. In the assessment of all of these receptors reference is made to "*Embedded environmental design (habitat enhancement)*" as part of the mitigation strategy, which is a reference to the Replacement Land enhancement.

3.19. Table 7.7 specifically records, on pages 94 – 95, that woodland management will result in more diverse habitats for invertebrates and improve food resources for foraging bats in the longer term.

3.20. Table 7.7 also records, on pages 99 – 100, that the enhancement measures proposed at Chatley Wood, Park Barn Farm and Hatch End will provide enhanced bird nesting opportunities.

4. Environmental Statement: conclusions

4.1. As we have said, if the listed parcels of Replacement Land are removed from the DCO Scheme, the existing ES will not comply with the minimum requirements of the IP (EIA) Regulations. Specifically, and particularly given that the creation and enhancement measures within the Replacement Land are so deeply embedded within the DCO Scheme design, the ES as drafted will contain:

4.1.1. an inaccurate description of the development including land use requirements;
4.1.2. an inaccurate and out of date description of likely significant effects on biodiversity (including habitats and individual species);
4.1.3. an inaccurate and out of date description of features or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;
4.1.4. an inaccurate or incomplete explanation of the extent to which likely significant adverse effects are avoided, prevented, reduced or offset.

4.2. It follows that, if the listed parcels of Replacement Land are removed from the DCO Scheme, any conclusion as to the significant effects of the DCO Scheme will be flawed if based on the existing ES. Any claim in the existing ES that the development

will, for example, result in long term beneficial effects is based on an inaccurate and out of date DCO Scheme design and is unreliable.

4.3. If an assessment of environmental impacts is to take into account environmental information beyond that contained in the existing ES (such as information now requested from the applicant as to the effects of removing the identified parcels of Replacement Land), it will be necessary to abandon the current DCO application and start again, with a new ES properly reflecting the amended DCO Scheme.

5. The Habitats Regulations Assessment: legal requirements

5.1. The Applicant's Habitats Regulations Assessment Report: Stage 1 Screening[13] identified that disturbance, by change in recreational use, is likely to have a significant effect on all three qualifying criteria of the Thames Basin Heaths SPA. Accordingly, pursuant to Regulations 63 and 84 of the Habitats Regulations[14], the Secretary of State must make an Appropriate Assessment of the effects of the DCO Scheme on the integrity of the Thames Basin Heaths SPA.

5.2. Pursuant to Regulation 63(5), the Secretary of State may grant the DCO *only* having ascertained that the DCO Scheme will not adversely affect the integrity of the Thames Basins Heath SPA *unless* the derogation tests under Regulation 64 apply. That is to say, there is no alternative solution and the DCO Scheme must be carried out for imperative reasons of overriding public interest.

5.3. Pursuant to Regulation 68, if the Secretary of State agrees to the DCO Scheme notwithstanding a negative assessment of the implications for the Thames Basin Heaths SPA (that is, if the Secretary of State concludes that the derogation tests under Regulation 64 apply), he must secure that any necessary compensatory measures are taken to ensure that the overall coherence of Natura 2000 is protected.

5.4. It follows that, unless the Secretary of State is satisfied that disturbance from recreational impacts will not adversely affect the integrity of the Thames Basin Heaths SPA, this impact must be carried through to an assessment of alternative solutions, imperative reasons of overriding public interest and necessary compensation. This is an absolute legislative requirement. It is not a matter of discretion.

5.5. The Applicant's Habitats Regulations Assessment Stage 2: Statement to inform appropriate assessment ("**HRA Stage 2**")[15] concludes that there will be no adverse effect on the integrity of the SPA from the DCO Scheme alone as a result of disturbance by changes in recreational use (paragraph 1.1.4). In combination impacts with other plans and projects was also ruled out (paragraph 1.1.5). Accordingly, adverse effects from disturbance by changes in recreational use were not taken not taken through to an assessment of alternative solutions, imperative reasons of overriding public interest and necessary compensation.

5.6. This conclusion was reached taking into account proposed mitigation measures (paragraph 1.1.3). As discussed below, the provision of publicly accessible Replacement Land, to draw recreational users away from the SPA, was relied on as mitigation in respect of recreational disturbance. The removal of 59% of the Replacement Land seriously undermines that mitigation and renders unsafe any

[13] Annex 1 of REP 4-018
[14] Conservation of Habitats and Species Regulations 2017
[15] REP 4-018

conclusion that there will be no adverse effect on the SPA from disturbance by changes in recreational use, from the DCO Scheme alone or in combination with other plans or projects.

6. **The Habitats Regulations Assessment: consequences of removing Replacement Land**

6.1. A number of application documents set out the principle of reliance on the Replacement Land as mitigation for the loss of SPA habitats. For example:

6.1.1. the Statement of Reasons states, at paragraph 5.1.5 that the Replacement Land can provide many biodiversity benefits including compensation planting for loss of ancient and other woodland and mitigation habitats for loss of SSSI and/or SPA habitats;

6.1.2. as discussed above, the ES Chapter 7 states, at paragraph 7.4.7, that the Replacement Land provides scope for the provision of mitigation or compensatory habitats for land lost from ecological designations; and

6.1.3. the Outline Construction Environment Management Plan ("**CEMP**")[16] in Table 12.1 on page 46, which summarises environmental monitoring requirements associated with mitigation measures set out in the ES, refers to "*Replacement land adjacent to the SSSI in the north-east and north-west quadrants"* as mitigation for the loss of SSSI and SPA habitat.

6.2. Paragraph 7.2.99 of the Applicant's HRA Stage 2 identified that changes to recreation use of the Thames Basin Heaths SPA arising from the DCO Scheme may lead to increased disturbance for the SPA birds. Paragraph 7.2.108 identified that provision of new surfaced NMU routes with the SPA and a new linkage bridge to the Chatley Wood Replacement Land (CF1 – CF4 which is now proposed to be lost) will be provided as mitigation. Paragraph 7.2.110 identified that the NMU route through Wisley Common will follow the existing track to Pond Farm and will link to the Park Barn Farm Replacement Land in the north-west quadrant (PBF1 – PBF3, of which the northern part of PB3 is now proposed to be lost). This is also identified in Table D.2 entitled "HRA-Specific Mitigation Measures" (p107) where, a column entitled "HRA-specific mitigation measure" refers to "*Provision of publicly accessible Replacement Land outside the SPA, which will draw some recreational users away from the SPA"*.

6.3. In addition, Table 11 (pages 62-68) entitled "*Potential adverse effects of the Scheme in combination with plans and projects within 2 km of the Ockham and Wisley Commons SSSI component of the Thames Basin Heaths SPA*" identified a number of projects where the justification for there not being any in combination effects in part relies on the provision of the NMU tracks and the provision of replacement land outside the SPA, e.g. the former Wisley Airfield (Table 11, page 63) and land surrounding West Hall, Parvis Road, West Byfleet (p66).

6.4. The HRA Stage 2 is consistent with other application documents that highlight the significance of the Replacement Land (and CF1 to CF4 in particular) for recreation use. As Replacement Land must be provided to replace public open space that is being lost as a result of the DCO Scheme, when discussing the reasons for selecting areas of Replacement Land the Statement of Reasons[17] emphasises (paragraphs 5.1.3 to 5.1.4) the importance of both accessibility and attractiveness of the selected land. It goes on to explain, at paragraph 5.1.5, that habitat interest or potential is key to the attractiveness of these public open spaces and is therefore a major factor in

[16] REP 7-014
[17] REP 12-004

determining the suitability of a site as "Replacement Land". These principles are picked up in a letter dated 10 July 2020[18] in which Surrey Wildlife Trust ("**SWT**") observes that there is an opportunity for the DCO Scheme to increase both the areas and quality of recreational land available to the public, that land which is suitable and correctly placed will attract visitors and that this is of benefit for those visitors and for the SPA bird population, which may experience decreased disturbance. As noted above in the context of EIA, the LEMP also records that the management objectives for parcels CF1 – CF4 includes "improve public access" and, for PF3 "facilitate public access".

6.5. It is unclear whether the linkage bridge between Ockham Common and Chatley Wood (see 7.2.108) will still be provided if the Chatley Wood Replacement Land is removed from the DCO Scheme. However, it is clear that Replacement Land areas CF1 to CF4 are relied upon to mitigate any recreational effects, as these areas are geographically close to the SPA and would have been connected to the SPA via the new bridge. Similarly, the Replacement Land at Park Barn Farm, part of which is to be lost, is relied via the NMU route and link with Wisley Common.

6.6. Although SWT promote the benefits of the Replacement Land at Park Barn Farm (and the removal of the northern section of PBF3 is certainly significant), the removal of CF1-4 is likely to have a disproportionally large impact on this mitigation mechanism as the other units of Replacement Land are more isolated from the SPA.

7. The Habitats Regulations Assessment: conclusions

7.1. The Applicant's HRA Stage 2 concludes that there will be no adverse effect on the integrity of the SPA from the DCO Scheme, alone or in combination with other plans or projects, as a result of disturbance by changes in recreational use. However, that conclusion relied on the provision of publicly accessible Replacement Land as mitigation for recreational disturbance. The removal of 56% of the Recreational Land renders that conclusion unsafe. The removal of parcels CF1 to CF4 is likely to have a particularly significant impact on the mitigation mechanism.

7.2. Removal of 59% of the Replacement Land would mean that the Secretary of State cannot be satisfied that disturbance from recreational impacts from the DCO Scheme will not adversely affect the integrity of the Thames Basin Heaths SPA. Therefore, this impact would have to be carried through to an assessment of alternative solutions, imperative reasons of overriding public interest and necessary compensatory habitat.

8. Policy / s40 of the Natural Environment and Rural Communities Act 2006

8.1. The issues above, relating to EIA and HRA, present legal bars to the Secretary of State granting the DCO consent on the basis of current assessments, if the Replacement Land is to be removed from the DCO Scheme.

8.2. However, to grant consent to the DCO Scheme, with the loss of 59% of the Replacement Land, would also be contrary to national planning policy and the Secretary of State's duty to conserve biodiversity under section 40 of the Natural Environment and Rural Communities Act 2006 (**"NERC"**).

8.3. Paragraph 5.22 of the National Policy Statement for National Networks (Department of Transport, December 2014) states that:

[18] REP 12-044

"Where the project is subject to EIA the applicant should ensure that the environmental statement clearly sets out any likely significant effects on internationally, nationally and locally designated sites of ecological or geological conservation importance (including those outside England) on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity and that the statement considers the full range of potential impacts on ecosystems".

8.4. We have demonstrated, above, that following removal of Replacement Land parcels from the DCO Scheme, the ES would not contain an accurate or complete assessment of likely significant effects on designated sites, habitats of principal importance or individual species.

8.5. Paragraph 5.27 of the National Policy Statement for National Networks protects European sites by reference to the Conservation of Habitats and Species 2017 legislation.

8.6. We have demonstrated, above, that following removal of Replacement Land parcels from the DCO Scheme, the Secretary of State could not conclude that there would be no adverse effect from the DCO Scheme on the integrity of the Thames Basin Heaths SPA through recreational impacts. This impact pathway would instead have to be taken through and included in the Secretary of State's consideration of the derogation tests and any necessary compensatory measures would also have to be taken to ensure that the overall coherence of Natura 2000 is protected.

8.7. Paragraph 5.23 of the National Policy Statement for National Networks provides that: "*The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests*".

8.8. Paragraph 5.29 of the National Policy Statement for National Networks provides for SSSIs that: "*Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted…. The Secretary of State should ensure that the applicant's proposals to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest, are acceptable…"*

8.9. Paragraph 5.33 of the National Policy Statement for National Networks provides that: *"Development proposals potentially provide many opportunities for building in beneficial biodiversity or geological features as part of good design. When considering proposals, the Secretary of State should consider whether the applicant has maximised such opportunities in and around developments…..".*

8.10. Paragraph 5.36 of the National Policy Statement for National Networks provides that: *"Applicants should include appropriate mitigation measures as an integral part of their proposed development, including identifying where and how these will be secured. In particular, the applicant should demonstrate that:*

[…]

- *opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals …*

8.11. Section 40(1) of NERC (the duty on public authorities to conserve biodiversity) applies to the Secretary of State when exercising functions. It states as follows:

"*The public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity*"

8.12. Section 40(3) of NERC states that "*Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat*".

8.13. Removal of 59% of the Replacement Land removes a significant element of mitigation that was integral to, and embedded in, the DCO Scheme design. The Replacement Land has been expressly identified as an opportunity to enhance existing habitats and to create new habitats as well as to mitigate against impacts on relevant SSSIs and European sites. Those opportunities will be lost if the Replacement land is removed. To grant consent to the DCO Scheme in these circumstances would be contrary to the Policy at paragraphs 5.23, 5.29, 5.33 and 5.36 and the section 40 duty, as set out above.

Freeths LLP
For the Royal Horticultural Society
19 November 2020

M25 JUNCTION 10/A3 WISLEY INTERCHANGE IMPROVEMENT SCHEME

DEVELOPMENT CONSENT ORDER

REPRESENTATION BY RHS

RESPONSE TO REP10-004 (APPLICANT'S REPONSE TO ExA Q4 – 4.13.1)

(Updated Nov 2020)

1.0 Introduction

1.1 This representation has been prepared by Mr Hibbert of TTHC and Mr Bunney of Hatch Regeneris on behalf of RHS and responds to the journey time results presented by the Applicant as set out in **REP10-004**.

1.2 In order to assist with understanding the differences between the DCO Scheme, including the modelled route and the signed route, and the RHS Alternative Scheme, the graphical representations of the respective routeing (as previously provided in **REP1-044 paragraph 2.11**) have been updated:

https://www.youtube.com/playlist?list=PLeCTDIIV1xbZWCXD5S_BAxf8GBwKRLHOY

1.3 As noted in **REP10-025** and **REP10-026**, the journey time estimates presented by RHS are calculated values based on estimated average journey times for the respective routes. It is noted that the Applicant journey times set out in REP10-004 are mostly based on model output with manual adjustments for the routeing components associated with the retained Wisley Lane movement on to the A3 northbound carriageway.

1.4 In order to assist in drawing comparisons between the Applicant and RHS data sets, the journey times from REP10-004 have been converted into average speeds and combined within tables with the RHS times, which are contained in **Appendix A (REP11-036A)** to this representation. Separate tables have been produced for AM peak hour, Inter-peak hour and PM peak hour.

2.0 Journey Time Comparisons

2.1 Most of the journey times between the two datasets compare well and are within 10kph (or 6mph) of each other. However, there are some exceptions and other matters which are shaded within the tables and discussed below, prior to conclusions being drawn.

AM Peak Hour

2.2 In the AM peak hour, the journey time difference between the RHS and Applicant figures for the route **from** the M25 east and west towards RHS is 3½ minutes in the DoMinimum scenario. It is expected that this difference is due to the RHS estimate not having fully accounted for the existing congestion in the AM at J10. Whilst this reduces the benefits of the DCO scheme and the RHS Alternative in terms of the improved journey times which would accrue over the DoMinimum, it doesn't have any bearing on the comparison between the DCO Scheme and the RHS Alternative.

2.3 From Wisley Lane heading South, the Applicant's model suggests an average speed of 48km/h for the RHS Alternative (via the southbound SFS) which is only 4km/h faster than the DoMinimum (which requires a u-turn at the signal controlled junctions of J10). When compared against the Applicant's signed route, the RHS Alternative (based on the model) is suggested to be 6km/h slower. This appears counter intuitive given that the DCO signed route, would require a u-turn at Ockham and a u-turn at J10. RHS would expect the option with SFS to have the highest average overall speed for this movement but this is not reflected in the Applicant's modelling.

2.4 There are two journey times for the RHS Alternative Scheme in the Applicant's model (namely those from RHS to the A3 North and M25(W)) which don't appear to be correct – see shaded speeds/journey times for these routes in the AM peak hour table. In these two cases, the journey times appear to underestimate the RHS Alternative by 1 to 2 minutes. The consequence of this apparent error is that the scale of benefit of the RHS Alternative vs either the DCO Scheme or the DoMinimum is overstated by the Applicant's figures for these two routes.

2.5 In any event, in all cases, whether Applicant data or RHS data is used, the RHS Alternative results in improved journey times against the DoMinimum and DCO Scheme for all round-trips in the AM peak hour:

- For those travelling to/from the south, the RHS Alternative would provide significant journey time savings of over the DCO Scheme of between 8 to 11 minutes.
- For those travelling to/from the north, the RHS Alternative would provide significant journey time savings of around 4 minutes.

Inter-peak Hour

2.6 In the Inter-peak hour, there are fewer significant differences between the datasets, meaning there is generally a good match between the RHS and Applicant journey times.

2.7 However, the Applicant's model results in a relatively low speed for the journey to and from the South to RHS for the RHS Alternative. The DCO signed route (which requires u-turns at Ockham roundabout and Junction 10) is suggested to be some 15km/h quicker from the south and some 10kph quicker for the return. This underestimates the benefits of the RHS Alternative when compared to the DCO Scheme.

2.8 There are again some journey times for the RHS Alternative Scheme from the Applicant's model (namely those from RHS to the A3 North and to M25(W)) which don't appear to be correct. In these two cases the journey times appear to be underestimated by around 1 minute. The consequence of this apparent error is that the scale of benefit of the RHS Alternative vs either the DCO Scheme or the DoMinimum is overstated by the Applicant's figures for these two routes.

2.9 In any event, in all cases, whether Applicant data or RHS data is used, the RHS Alternative results in improved journey times against the DoMinimum and DCO Scheme for all round trips in the AM peak hour:

- For those travelling to/from the south, the RHS Alternative would provide significant journey time savings of over the DCO Scheme of between 6 to 12 minutes.
- For those travelling to/from the north, the RHS Alternative would provide significant journey time savings of around 3 minutes.

PM Peak Hour

2.10 In the PM peak hour, there are again fewer significant differences between the datasets than in the AM peak hour, meaning that there is generally a good match between the RHS and Applicant journey times.

2.11 Again, however, the Applicant's model results in a relatively low speed for the journey to and from the South for the RHS Alternative. The DCO signed route (which requires u-turns at Ockham roundabout and Junction 10) is suggested to be some 12km/h quicker from the south and some 7kph quicker for the return. This underestimates the benefits of the RHS Alternative when compared to the DCO signed route.

2.12 There are again some journey times for the RHS Alternative Scheme from the Applicant's model (namely those from RHS to the A3 North and to M25(E)) which don't appear to be correct. In these two cases the journey times appear to be underestimated by around 1 minute and 1½ minutes respectively. The consequence of this apparent error is that the scale of benefit of the RHS Alternative vs either the DCO Scheme or the DoMinimum is overstated by the Applicant's figures for these two routes.

2.13 As with the other time periods, in all cases, whether Applicant data or RHS data is used, the RHS Alternative results in improved journey times against the DoMinimum and DCO Scheme for all round trips in the PM peak hour:

- For those travelling to/from the south, the RHS Alternative would provide significant journey time savings of over the DCO Scheme of between 10 to 14 minutes.
- For those travelling to/from the north, the RHS Alternative would provide significant journey time savings of around ~~3 to~~ 3½ minutes.

Overall Summary

2.14 As noted, irrespective of whichever data set is used and irrespective of which time period, the RHS Alternative Scheme results in journey times which are significantly improved against the DCO Scheme, whether the signed or modelled route.

3.0 Socio-economic Impact Analysis

3.1 Hatch Regeneris have reviewed the journey time data provided by Highways England for the DCO Scheme and RHS Alternative scheme, along with the equivalent assessment undertaken by TTHC on behalf of the RHS (REP10-025).

3.2 On the basis of the information presented, sensitivity tests have been undertaken on some of the key outputs from the socio-economic impact analysis presented in REP6-024.

3.3 The Hatch Regeneris central case analysis in Table 14, REP6-024 forecasts the DCO Scheme will result in a transport user impact of -£28.8 million, with a further wider economic impact of -£58.6 million.

3.4 Notwithstanding the RHS objections to the Highways England journey time assessment, even if these were applied then the impacts would still be of a comparable magnitude (-£24.5 million and -£54.4 million, respectively).

3.5 The comparative central case socio-economic forecasts are presented in the table overleaf for each of Hatch Regeneris, Highways England (HE) and TTHC journey time forecasts, for both the impact of the DCO Scheme and the RHS Alternative.

3.6 In all cases, these sensitivity tests demonstrate that the DCO Scheme will have significant negative socio-economic impact and that the RHS Alternative Scheme offers significant improvement in comparison to the DCO Scheme of between £56 million and £74 million.

Table 1 - Outputs from Sensitivity Tests showing relative impact of different sources of Journey Time data upon the economic impact of the DCO Scheme and RHS Alternative in relation to trips to and from the Garden at Wisley (£ million, 2020 prices)

		Source of Journey Time Data		
Scheme	***Type of Impact***	***Hatch***	***HE***	***TTHC***
DCO Scheme	Transport User Impact	-28.8	-24.5	-30.6
	Wider Economic Impact	-58.5	-54.4	-59.8
	Total Economic Impact	**-87.3**	**-78.9**	**-90.4**
RHS Alternative	Transport User Impact	5.8	4.7	11.2
	Wider Economic Impact	-27.7	-27.7	-27.7
	Total Economic Impact	**-21.9**	**-23.0**	**-16.5**
Difference RHS Alt. vs DCO	Transport User Impact	34.6	29.2	41.8
	Wider Economic Impact	30.8	26.7	32.1
	Total Economic Impact	**65.4**	**55.9**	**73.9**

APPENDIX A

JOURNEY TIME COMPARISON TABLES

[See REP11-036A]

DCO (M25 J10/A3) - JOURNEY TIME COMPARISONS (REP10-032 vs REP10-004)

REP11-036A

AM PEAK

From A3 South to RHS (Distance Plot 1 of 8)	Measured Distance (m)	Estimated Ave Speed (km/h)	Estimated JT (secs)	To A3 South from RHS (Distance Plot 2 of 8)	Measured Distance (m)	Estimated Ave Speed (km/h)	Estimated JT (secs)	Round Trip A3 South-RHS	Estimated JT (secs)
Existing (via A3, left turn in to Wisley Ln)	5,965	64 66	337 324	Existing (via Wisley Ln priority junction with collector road, A3, u-turn at J10, A3)	8,845	45 44	711 732	**Existing (via A3)**	**1048** **1056**
DCO Signed Scheme (via A3, u-turn at J10, A3, u-turn at Ockham, A3, Wisley Ln)	11,850	51 61	833 702	DCO Signed Scheme (via Wisley Ln bridge, u-turn at Ockham, A3, u-turn at J10, A3)	11,325	58 54	708 756	**DCO Signed Scheme (via A3)**	**1541** **1458**
DCO Scheme (via A3, Send, Ripley, Ockham rbt, Wisley Ln bridge)	6,410	30 33	759 690	DCO Scheme (via Wisley Ln bridge, Ockham rbt, Ripley, Send, A3)	6,450	34 35	679 660	**DCO Scheme (via Send and Ripley)**	**1438** **1350**
RHS Alternative (via A3, slip at Ockham, Wisley Ln bridge)	6,355	58 48	397 480	RHS Alternative (via Wisley Ln bridge, Ockham rbt, slip onto A3)	5,315	65 48	295 396	**RHS Alternative**	**692** **876**
From A3 North to RHS (Distance Plot 3 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To A3 North from RHS (Distance Plot 4 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip A3 North-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,270	58 64	267 240	Existing (via Wisley Lane priority junction with collector road, A3)	2,405	40 48	216 180	**Existing (via A3)**	**483** **420**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,135	63 67	236 222	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	4,735	54 60	313 282	**DCO Scheme (via Ockham & Link)**	**550** **504**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,135	63 67	236 222	RHS Alternative (via Wisley slip, A3)	2,410	75 181	116 48	**RHS Alternative (via Wisley slip)**	**352** **270**
From M25(E) to RHS (Distance Plot 5 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To M25(E) from RHS (Distance Plot 6 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip M25(E)-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,460	58 32	279 498	Existing (via Wisley Lane priority junction with collector road, A3)	2,865	40 43	258 240	**Existing (via A3)**	**537** **738**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,300	63 57	246 270	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	5,235	54 52	346 360	**DCO Scheme (via Ockham & Link)**	**592** **630**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,300	63 57	246 270	RHS Alternative (via Wisley slip, A3)	2,910	78 83	134 126	**RHS Alternative (via Wisley Slip)**	**380** **396**
From M25(W) to RHS (Distance Plot 5 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To M25(W) from RHS (Distance Plot 6 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip M25(W)-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,670	58 41	292 414	Existing (via Wisley Lane priority junction with collector road, A3)	2,450	40 43	221 204	**Existing (via A3)**	**512** **618**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,655	63 54	266 312	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	4,760	54 68	315 252	**DCO Scheme (via Ockham & Link)**	**581** **564**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,655	63 54	266 312	RHS Alternative (via Wisley slip, A3)	2,420	75 484	116 18	**RHS Alternative (via Wisley Slip)**	**382** **330**

M25 Anti-Clockwise & Clockwise cell value transposition corrected

DCO (M25 J10/A3) - JOURNEY TIME COMPARISONS (REP10-032 vs REP10-004)

REP11-036A

INTER-PEAK

From A3 South to RHS (Distance Plot 1 of 8)	Measured Distance (m)	Estimated Ave Speed (km/h)	Estimated JT (secs)	To A3 South from RHS (Distance Plot 2 of 8)	Measured Distance (m)	Estimated Ave Speed (km/h)	Estimated JT (secs)	Round Trip A3 South-RHS	Estimated JT (secs)
Existing (via A3, left turn in to Wisley Ln)	5,965	85	253	Existing (via Wisley Ln priority junction with collector road, A3, u-turn at J10, A3)	8,845	56	569	**Existing (via A3)**	**821**
		70	306			54	588		**894**
DCO Signed Scheme (via A3, u-turn at J10, A3, u-turn at Ockham, A3, Wisley Ln)	11,850	64	667	DCO Signed Scheme (via Wisley Ln bridge, u-turn at Ockham, A3, u-turn at J10, A3)	11,325	64	637	**DCO Signed Scheme (via A3)**	**1304**
		66	642			60	684		**1326**
DCO Scheme (via A3, Send, Ripley, Ockham rbt, Wisley Ln bridge)	6,410	38	607	DCO Scheme (via Wisley Ln bridge, Ockham rbt, Ripley, Send, A3)	6,450	38	611	**DCO Scheme (via Send and Ripley)**	**1218**
		39	594			38	606		**1200**
RHS Alternative (via A3, slip at Ockham, Wisley Ln bridge)	6,355	72	318	RHS Alternative (via Wisley Ln bridge, Ockham rbt, slip onto A3)	5,315	72	266	**RHS Alternative**	**584**
		51	450			50	384		**834**
From A3 North to RHS (Distance Plot 3 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To A3 North from RHS (Distance Plot 4 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip A3 North-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,270	64	240	Existing (via Wisley Lane priority junction with collector road, A3)	2,405	80	108	**Existing (via A3)**	**348**
		71	216			80	108		**324**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,135	70	213	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	4,735	64	266	**DCO Scheme (via Ockham & Link)**	**479**
		73	204			66	258		**462**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,135	70	213	RHS Alternative (via Wisley slip, A3)	2,410	88	99	**RHS Alternative (via Wisley slip)**	**311**
		73	204			181	48		**252**
From M25(E) to RHS (Distance Plot 5 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To M25(E) from RHS (Distance Plot 6 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip M25(E)-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,460	64	251	Existing (via Wisley Lane priority junction with collector road, A3)	2,865	80	129	**Existing (via A3)**	**380**
		50	318			55	186		**504**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,300	70	221	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	5,235	64	294	**DCO Scheme (via Ockham & Link)**	**516**
		60	258			58	324		**582**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,300	70	221	RHS Alternative (via Wisley slip, A3)	2,910	88	119	**RHS Alternative (via Wisley Slip)**	**340**
		60	258			92	114		**372**
From M25(W) to RHS (Distance Plot 5 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To M25(W) from RHS (Distance Plot 6 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip M25(W)-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,670	64	263	Existing (via Wisley Lane priority junction with collector road, A3)	2,450	80	110	**Existing (via A3)**	**373**
		53	318			67	132		**450**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,655	70	239	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	4,760	64	268	**DCO Scheme (via Ockham & Link)**	**507**
		59	282			73	234		**516**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,655	70	239	RHS Alternative (via Wisley slip, A3)	2,420	88	99	**RHS Alternative (via Wisley Slip)**	**338**
		59	282			363	24		**306**

DCO (M25 J10/A3) - JOURNEY TIME COMPARISONS (REP10-032 vs REP10-004)

REP11-036A

PM PEAK

From A3 South to RHS (Distance Plot 1 of 8)	Measured Distance (m)	Estimated Ave Speed (km/h)	Estimated JT (secs)	To A3 South from RHS (Distance Plot 2 of 8)	Measured Distance (m)	Estimated Ave Speed (km/h)	Estimated JT (secs)	Round Trip A3 South-RHS	Estimated JT (secs)
Existing (via A3, left turn in to Wisley Ln)	5,965	68 66	316 324	Existing (via Wisley Ln priority junction with collector road, A3, u-turn at J10, A3)	8,845	42 49	758 648	**Existing (via A3)**	**1074** **972**
DCO Signed Scheme (via A3, u-turn at J10, A3, u-turn at Ockham, A3, Wisley Ln)	11,850	58 62	741 690	DCO Signed Scheme (via Wisley Ln bridge, u-turn at Ockham, A3, u-turn at J10, A3)	11,325	51 55	796 744	**DCO Signed Scheme (via A3)**	**1537** **1434**
DCO Scheme (via A3, Send, Ripley, Ockham rbt, Wisley Ln bridge)	6,410	34 38	675 600	DCO Scheme (via Wisley Ln bridge, Ockham rbt, Ripley, Send, A3)	6,450	30 37	764 636	**DCO Scheme (via Send and Ripley)**	**1439** **1236**
RHS Alternative (via A3, slip at Ockham, Wisley Ln bridge)	6,355	65 50	353 462	RHS Alternative (via Wisley Ln bridge, Ockham rbt, slip onto A3)	5,315	58 48	332 396	**RHS Alternative**	**685** **858**
From A3 North to RHS (Distance Plot 3 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To A3 North from RHS (Distance Plot 4 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip A3 North-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,270	51 61	300 252	Existing (via Wisley Lane priority junction with collector road, A3)	2,405	72 76	120 114	**Existing (via A3)**	**420** **366**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,135	56 65	266 228	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	4,735	58 60	296 282	**DCO Scheme (via Ockham & Link)**	**562** **510**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,135	56 65	266 228	RHS Alternative (via Wisley slip, A3)	2,410	79 121	110 72	**RHS Alternative (via Wisley slip)**	**375** **300**
From M25(E) to RHS (Distance Plot 5 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To M25(E) from RHS (Distance Plot 6 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip M25(E)-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,460	51 37	314 438	Existing (via Wisley Lane priority junction with collector road, A3)	2,865	72 55	143 186	**Existing (via A3)**	**457** **624**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,300	56 65	276 240	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	5,235	58 53	327 354	**DCO Scheme (via Ockham & Link)**	**604** **594**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,300	56 65	276 240	RHS Alternative (via Wisley slip, A3)	2,910	79 73	132 144	**RHS Alternative (via Wisley Slip)**	**409** **384**
From M25(W) to RHS (Distance Plot 5 of 8)	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**To M25(W) from RHS (Distance Plot 6 of 8)**	**Measured Distance (m)**	**Estimated Ave Speed (km/h)**	**Estimated JT (secs)**	**Round Trip M25(W)-RHS**	**Estimated JT (secs)**
Existing (via A3, u-turn at Ockham, A3, Wisley Ln)	4,670	51 44	328 384	Existing (via Wisley Lane priority junction with collector road, A3)	2,450	72 53	123 168	**Existing (via A3)**	**451** **552**
DCO Scheme (via A3, u-turn at Ockham, Wisley Ln bridge)	4,655	56 53	299 318	DCO Scheme (via Wisley Ln bridge, u-turn at Ockham, A3)	4,760	58 58	298 294	**DCO Scheme (via Ockham & Link)**	**597** **612**
RHS Alternative (via A3, u-turn at Ockham, Wisley Ln bridge)	4,655	56 53	299 318	RHS Alternative (via Wisley slip, A3)	2,420	79 104	110 84	**RHS Alternative (via Wisley Slip)**	**409** **402**

M25 Anti-Clockwise & Clockwise cell value transposition corrected

RHS RESPONSES TO HIGHWAYS ENGLAND'S REP12-024

1. This document is prepared in response to point 7 in the Secretary of State's letter dated 4 November 2020, where the Secretary of State is inviting comments on the documents submitted by various parties at Deadline 11 and 12.

2. This response provides a response to Highways England's document REP12-024. The RHS's responses to selected sections and paragraphs are set out below. Not every section and paragraph is responded to, so not every section is reproduced.

Section 3.2 The suggested overlap between SPA enhancement areas proposed by HE as part of the suite of compensatory measures and the draft Surrey Wildlife Trust Wisley and Ockham management plan	
Highways England Text in REP12-024	**RHS Response**
3.2.1 This has been raised by RHS in their deadline 11 submissions REP11-038 (4.4.3, 4.4.5), REP11-042, REP11-043, REP11-044, REP11-045 and REP11-046. 3.2.2 The suite of compensatory measures are additional to the management undertaken or planned by Surrey Wildlife Trust for the Ockham and Wisley Commons SSSI component of the SPA. M25 junction 10/A3 Wisley interchange TR010030 9.144 Applicant's Comments to RHS's D11 Submission Planning Inspectorate scheme reference: TR010030 Application document reference: TR010030/APP/9.144 (Vol 9) Rev 0 Page 7 of 24 3.2.3 As set out in Annex B [REP4-016] and Annex C [REP4-017] of the HRA, the suite of compensatory measures were designed under consultation with key stakeholders, including Natural England and Surrey Wildlife Trust.	Highways England asserts at 3.2.6 that *"the ExA can be absolutely certain that the suite of compensatory measures fall outside the management proposals for the Ockham and Wisley Commons SSSI component of the SPA".* Put simply, this statement does not accord with the facts, neither the written evidence of the SWT management plan nor the situation on the ground. Highways England states at 3.2.5 that Surrey Wildlife Trust reports the following (and indeed this is repeated in the Surrey Wildlife Trust letter dated 10 July (REP12-044)). The RHS' comments are added under each statement: "*The management plan was written in 2009/10*". The Wisley and Ockham Commons Management Plan 2010-2020 (RE10-019) is undated although is clearly a Management Plan for the period 2010-2020. "*The tree felling and thinning works within that plan which the Baker analysis is based upon were carried out in the late 2000's and early 2010's. The works were planned to take part throughout the early part of the plan but were accelerated in*

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3.2.4 As explained in Point 11 on page 17 of Highways England's comments on RHS's deadline 3 submission [REP4-005], the current management plan for the Ockham and Wisley Commons SSSI component of the SPA is to maintain existing areas of heathland, rather than creating new areas of heathland by removing additional areas of the coniferous woodland buffer. 3.2.5 The Surrey Wildlife Trust issued an email to Atkins Ltd on the 8th July 2020 in relation to RHS's deadline 11 submission. The following four points are taken directly from that email: 1. "The management plan was written in 2009/10. 2. The tree felling and thinning works within that plan which their consultant is basing their analysis upon were carried out in the late 2000's and early 2010's. Both the thinning and felling works were completed then. 3. The works that have been designed as part of the DCO proposal are in addition to those previously delivered management plans works. i.e. Natural England, the Forestry Commission, Atkins, HE, RSPB and SWT met to discuss the future works and how they would go beyond the scope of the work already delivered in the management plan. We made that clear to the consultant in an email of the 12th February 2020. 4. We will be producing a new management plan for the site that will deal with the areas outside the red line boundary (and associated mitigation and compensation areas). The works that are proposed by HE will be funded by them and we believe will deliver genuine improvements for the SPA species."	*consultation with the Forestry Commission. Both the thinning and felling works were completed then*". This is quite obviously not the case: If all the work envisaged under the Wisley and Ockham Commons Management Plan 2010-2020 (RE10-019) had already been undertaken in the late 2000s and the early 2010s (note that the location of these works are summarised on Baker Consultants Ltd's Figure 1 (REP11-042)) then those parcels would already be woodland-cleared or woodland-thinned. But this is not the case. Whilst the RHS has not been able to check every parcel in Baker Consultants Ltd's Figure 1, in general the woodland still stands. Furthermore, if the woodland in Baker Consultants Ltd's Figure 1 parcels had already been cleared or thinned in accordance with the Wisley and Ockham Commons Management Plan in the late 2000s or early 2010s, it would make no sense whatsoever for some of that same woodland to be identified for future clearance or felling in HE's SPA Enhancement Areas E1-E8. Yet this is exactly what HE is proposing. Baker Consultant Ltd's Figure 3 (REP11-044) shows the overlap between (i) the woodland clearance and woodland thinning envisaged in the Management Plan 2010-2020; and (ii) the woodland clearance and thinning proposed by HE in its SPE Enhancement Areas. The areas overlap and Baker Consultants Ltd's Figure 4 (REP11-045) then shows clearly the result, which is that there are large areas where HE's proposed management in the SPA Enhancement areas amounts to "no gain" or a "downgrade" compared with the Management Plan. The Management Plan is called the "*Wisley and Ockham Commons Management Plan 2010-2020*". It therefore obviously covers the period 2010-2020. Indeed section 3.1.3 of the Management Plan confirms "*This management plan sets out the*

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3.2.6 Therefore, the thinning and felling works within the Wisley and Ockham Commons management plan [REP10-019] were completed in the early 2010's, with no further works proposed for the remainder of the management period (2010-2020). It was confirmed by Surrey Wildlife Trust and Natural England that the proposals for the SPA enhancement areas fall outside 'normal practice' and would not have occurred as part of the existing management of the SPA (Item 4.0 of the meeting minutes of 16 March 2018 in the HRA Annex B consultation report [REP4-016] and Item 3.2.8 of the SOCG between Highways England and Natural England [REP8-022]). Therefore, regardless of RHS's detailed commentary on a management plan that was written in 2009, Highways England and the ExA can be absolutely certain that the suite of compensatory measures fall outside the management proposals for the Ockham and Wisley Commons SSSI component of the SPA.	*management objectives and work programmes for Ockham & Wisley Commons that will be implemented by these staff for the period 2010-2020. The management plan will be reviewed in its entirety in 2019*". It is claimed above by Surrey Wildlife Trust and Highway England that "*The tree felling and thinning works within that plan which the Baker analysis is based upon were carried out in the late 2000's and early 2010's*". It would be strange in the extreme if works that had already been completed "*in the late 2000s*" were included in a Management Plan expressly covering the next decade 2010-2020. This makes no sense at all. There is yet a further factor that indicates that Highways England and Surrey Wildlife Trust are incorrect. This is that Highways England's own document acknowledges that recent woodland management (thinning) has been ongoing in the area called SPA Enhancement Area E5. And thinning in this area is exactly what the Management Plan 2010-2020 prescribes. Highways England's REP4-014 (5.1.61) discusses the thinning that has taken place recently at SPA Enhancement Area E5: "*Much of this area has been recently thinned as part of the ongoing management of the woodland*". SPA Enhancement Area E5 corresponds to the Management Plan management compartments 5c / 5a (see Baker Consultant Ltd Figure 3 (REP11-044). In the Management Plan 2010-2020 compartments 5c and 5a are identified as requiring thinning. This recent management, entirely consistent with the 2010-2020 Management Plan, is therefore at odds with the statement from Highways England and Surrey Wildlife Trust that "*The tree felling and thinning works within that* [Management*] plan which the Baker analysis is based upon were carried out in the late 2000's and early 2010's*". "*As such the works that have been designed as part of the DCO proposal are in addition to those previously delivered management plans works. i.e. Natural England, the Forestry Commission, Atkins, HE, RSPB and SWT met to discuss the*

Section 3.2 The suggested overlap between SPA enhancement areas proposed by HE as part of the suite of compensatory measures and the draft Surrey Wildlife Trust Wisley and Ockham management plan	
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	future works and how they would go beyond the scope of the work already delivered in the management plan". This statement simply fails to accord with the clear documentary evidence before the Secretary of State, i.e. the Wisley and Ockham Commons Management Plan 2010-2020 (RE10-019). Nothing in REP12-024 from Highways England nor in REP12-043 from Surrey Wildlife Trust alters this position. As explained above, the assertions made in REP12-02 and REP12-043 do not make sense or marry up with the documents or previous statements made by HE. "*We will be producing a new management plan for the site that will deal with the areas outside the red line boundary (and associated mitigation and compensation areas). The works that are proposed by HE will be funded by them and we believe will deliver genuine improvements for the SPA species*". This is no surprise. It again accords with the Management Plan 2010-2020. Section 3.1.3 of the Management Plan confirms "*This management plan sets out the management objectives and work programmes for Ockham & Wisley Commons that will be implemented by these staff for the period 2010-2020. The management plan will be reviewed in its entirety in 2019*".

Section 3.4 The established woodland buffer is not a supporting habitat for any of the qualifying SPA species	
Highways England Text in REP12-024	**RHS Response**
3.4.1 As RHS have pointed out, the SiAA does use the words 'supporting habitat'. However, RHS have taken this out of context, and incorrectly	Highways England is incorrect. RHS' comprehensive answer to this point is found in paragraphs 74-81.6.2 of Freeths LLP's "RHS Submissions on the DCO Scheme in

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suggest this implies supporting habitat as defined in the Conservation Objectives. Reading the words in their context, it is clear that this is referring to the potential for the established woodland buffer to contribute to the invertebrate resource of nightjars, and is not referring to a supporting habitat as defined in the conservation objectives (i.e. a feeding, nesting or roosting habitat of any of the SPA qualifying species). 3.4.2 Highways England has clearly demonstrated this in Section 4.7 of the SiAA [REP4-018], Section 4.3 of Applicant's comments on Deadline 9 submissions [REP10-003] and the response to question 4.4.13 on pages 16-18 of Highways England's comments to Deadline 10 submissions [REP11-007].	relation to Regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017" (REP12-056)

Section 3.5 The conservation objectives do not apply equally to all parts of the SPA	
Highways England Text in REP12-024	**RHS Response**
3.5.1 As explained previously in Point 11 on pages 10-11 of Highways England's comments on RHS's deadline 3 submission [REP4-005] a site's conservation objectives do not apply equally to all parts of a site. 3.5.2 Natural England guidance has clearly recognised this, and indeed paragraph 4.18 of Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001) [REP3-021] states "a site's conservation objectives are unlikely to apply equally to all parts of a site and a competent authority may need to be made aware of this as necessary".	Highways England is incorrect. The RHS' comprehensive answer to this point is found in paragraphs 74-81.6.2 of Freeths LLP's "RHS Submissions on the DCO Scheme in relation to Regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017" (REP12-056). In relation to the Compton Parish Council decision, the RHS has explained exactly why that case is not applicable in the present circumstances. Please see paragraph 89 of Freeths LLP's REP12-056 which sets out the reasons why Compton does not apply here. The RHS notes that Highways England has consistently failed to engage with those reasons, even though they were previously presented by Freeths LLP in paragraph 38 of REP6-024.

Section 3.5 The conservation objectives do not apply equally to all parts of the SPA	
Highways England Text in REP12-024	**RHS Response**
3.5.3 This approach fully aligns with the Compton case (as explained during Issue Specific Hearing 2 and in paragraphs 5.1.1-5.1.7 of the written summary of oral case for ISH2 [REP3-009], and again in Point 11 on page 16 of Highways England's comments on RHS's deadline 3 submission [REP4-005]), where the court concluded that when undertaking an air quality assessment within an SPA, it is necessary to assess whether there is an effect on the protected species and their habitats. 3.5.4 Highways England has shown repeatedly throughout the DCO examination that none of the SPA qualifying species occur within the established woodland buffer, and that it is not a nesting, feeding or roosting habitat as set out in the explanatory notes for the air quality conservation objectives (as set out in Tables 1, 2 and 3 of the Supplementary Advice on Conserving and Restoring Site Features [REP5-034]).	

Section 3.6 There will not be an air quality impact on the invertebrate assemblage of the established woodland buffers as a result of the Scheme	
Highways England Text in REP12-024	**RHS Response**
3.6.1 Contrary to RHS's statement in 4.4.12 of its response to ExQ4 responses [REP11-038], Highways England does not contradict itself with regard to air quality impacts on the invertebrate assemblage of the established woodland buffer, as set out in Highways England's comments on RHS's deadline 6 submission [REP7-008]. 3.6.2 Paragraphs 2.2.4- 2.2.29 of REP7-008 sets out a three point clarification as to why the invertebrate assemblage within the established	The RHS notes 3.6.1-3.6.3. At 3.6.4 Highways England concludes "*HE is clear that there will be no adverse effect on the integrity of the SPA as a result of changes in air quality*". Highways England is incorrect. The RHS refers to paragraphs 82-88 of Freeths LLP's "RHS Submissions on the DCO Scheme in relation to Regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017" (REP12-056).

Section 3.6 There will not be an air quality impact on the invertebrate assemblage of the established woodland buffers as a result of the Scheme	
Highways England Text in REP12-024	**RHS Response**
woodland buffer will not change as a result of air quality changes from the Scheme. 3.6.3 Point 1 (paragraphs 2.2.5-2.2.21) considers what effects (or absence of effects) on the invertebrate assemblage may occur from minor changes in air quality, when comparing the operational Scheme against a no scheme scenario. But then Point 2 (paragraphs 2.2.22-2.2.25) goes on to demonstrate that the predicted nitrogen deposition rates as a result of the operational Scheme still fall below the existing baseline and therefore the established woodland buffer will continue to function in its current form and provide the invertebrate resource it currently does (Point 3 in paragraphs 2.2.26-2.2.29 then goes on to conclude that the SiAA was correct to rule out an adverse effect on the SPA as a result of air quality changes). 3.6.4 There is no contradiction in this response, and Highways England is clear that there will be no adverse effect on the integrity of the SPA as a result of changes in air quality.	

Section 3.7 Summary of HE's key points regarding air quality and the SIAA	
Highways England Text in REP12-024	**RHS Response**
3.7.2 For the convenience of the ExA, these key points are repeated here, but have been updated where relevant, in reference to additional information provided during deadline 10 [REP10-003, REP10-004, REP10-007] and deadline 11 [REP11-007].	n/a

Section 3.7 Summary of HE's key points regarding air quality and the SIAA	
Highways England Text in REP12-024	**RHS Response**
3.7.2 (1) Clear, robust evidence has been provided by Highways England to demonstrate that, with regard to the conservation objectives for the SPA, the established woodland buffer is not a supporting habitat for the SPA qualifying species. This is demonstrated in the vegetation characteristics described in Tables 1, 2 and 3 of the Supplementary Advice on Conserving and Restoring Site Features [REP5-034] and has been demonstrated clearly by Highways England in Section 4.7 of the SiAA [REP4-018], Section 4.3 of Applicant's comments on Deadline 9 submissions [REP10-003] and the response to question 4.4.13 on pages 16-18 of Highways England's comments to Deadline 10 submissions [REP11-007]; 3.7.2 (2) The air quality conservation objective for the Thames Basin Heaths SPA (as described in Tables 1, 2 and 3 of the Supplementary Advice on Conserving and Restoring Site Features [REP5-034]) as regards all three qualifying species, is to "Restore as necessary the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System". This objective (described as targets in the tables) relates to the feeding, nesting and roosting habitat of the SPA qualifying species (as explained in the supporting and/ or explanatory notes for this target in the tables), which is the heathland and not the established woodland;	3.7.2 (1) and 3.7.2 (2): This is incorrect. See paragraphs 74-81.6.2 of Freeths LLP's "RHS Submissions on the DCO Scheme in relation to Regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017" (REP12-056)
3.7.2 (3). The bird surveys for the site were thorough and appropriate, using methodologies agreed with Natural England. The surveys were repeated over four years to provide an extremely high level of understanding of the site, and were combined with existing research with regard to the habitat requirements of Dartford warbler, nightjar and woodlark (as set out in Section 4.7 of the SiAA [REP4-018]), in order to fully	3.7.2 (3): This is incorrect: See paragraph 81.1 of Freeths LLP's "RHS Submissions on the DCO Scheme in relation to Regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017" (REP12-056)

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Highways England Text in REP12-024	**RHS Response**
understand the distribution and habitat requirements of all three qualifying species. The SPA qualifying species only occur within the heathland habitats and do not use the established woodland;	
3.7.2 (4) As stated in paragraph 4.21 in Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001) [REP3-021], "*If none of the site's sensitive qualifying features known to be present within 200 m are considered to be at risk due to their distance from the road, there is no credible risk of a significant effect which might undermine a site's conservation objectives"*; 3.7.2 (5) Paragraph 4.19 of the same document states: "*Where the applicant has provided reliable and precise information that models the likely deposition of road based pollutants in relation to the distribution of a site's features and any sensitive features are not present within the area to be affected by emissions (and Natural England's advice is that there is no conservation objective to restore the features to that area), it will be relatively straightforward to ascertain that the project poses no credible air quality risk to it"*;	3.7.2 (4) and (5): The quotations are stated to be taken from the Natural England guidance (June 2018). But this Natural England guidance (REP3-021) predates the 7 November 2018 CJEU judgment in *Holohan vs An Board Pleanala* (C-461/17). As noted by Freeths LLP at paragraph 81.6.2 of REP12-056, the *Holohan* case puts beyond doubt that Highways England is *wrong* in its assertion that the sole relevant concern here is the location within the SPA of the site's sensitive *qualifying features. Holohan* confirms that impacts on the invertebrate *prey* of the SPA qualifying features must also be considered in the Secretary of State's appropriate assessment in this case.
3.7.2 (6) As Highways England has explained, there will not be a discernible effect on nitrogen deposition rates at a distance of 150 m or more from the A3 and M25 as a result of the Scheme (i.e. where the SPA qualifying species and their habitats occur);	This is incorrect. The modelling has shown that increases in nitrogen deposition of greater than 1% occur at all distances in the in-combination scenario (REP11-040, with correction for transect 4 in REP11-041).
3.7.2 (7) Increases in nitrogen deposition of greater than 1 % of the lower range of the critical load (as given by APIS for the habitat types of the Ockham and Wisley Commons SSSI component of the SPA) when	This is incorrect. The modelling has shown that increases in nitrogen deposition of greater than 1% occur at all distances in the in-combination scenario (even beyond 150m) (REP11-040, with correction for transect 4 in REP11-041).

Section 3.7 Summary of HE's key points regarding air quality and the SIAA	
Highways England Text in REP12-024	**RHS Response**
comparing the operational Scheme against no Scheme, are confined to within 50 m of the road (A3 and M25). This falls well within the established woodland buffer, which is not a supporting habitat of the SPA qualifying species, and which extends over 150 m from the road at the closest point along any of the transects within the SPA;	In addition, the HRS has presented clear and scientifically robust evidence to demonstrate that the woodland within 150m of the A3 and M25 is not simply a 'buffer' but is in fact supporting habitat for the SPA birds for the invertebrates it supports. The legal consequence of this failure to assess these impacts in this part of the SPA have been detailed in REP12-056.
3.7.2 (8) For every transect point assessed within the SPA, the operational nitrogen deposition rate will fall below current baseline levels. As explained in the response to question 4.4.12 on pages 15-16 of Highways England's comments to Deadline 10 submissions [REP11-007], this would still be the case even if the change in nitrogen deposition rate were to be doubled as a precautionary measure to account for ammonia from road vehicles. Any small change in nitrogen deposition rates with the Scheme would not affect the future downward trend nor would there be any delay to the achievement of the conservation objectives on air quality mentioned above;	The last sentence in the HE response is incorrect. It is wrong to say that an increase in nitrogen deposition *"would not affect the future downward trend nor would there be any delay to the achievement of the conservation objectives".* The scheme will increase deposition rates both alone and in combination, which will reduce the downward trend, which would in turn delay the achievement of the conservation objectives.
3.7.2 (9) The in-combination assessment was carried out correctly, and the nitrogen deposition rates do take account of other plans and projects. Updated calculations with the change in nitrogen deposition rates doubled for the first 30 m from the road as a precautionary measure to account for ammonia have been provided in response to ExQ4 4.3.3 [REP10-007]. This precautionary sensitivity test continues to show that even when compared against an unrealistic 'do nothing' scenario (i.e. there would be absolutely no growth in traffic from the base year) there would be no discernible change in nitrogen deposition rates within the supporting habitats of the qualifying features in the SPA (i.e. the heathland beyond 150 m of the road edge). The calculations also demonstrate that when compared against 'do	It is incorrect to say that the in-combination assessment was carried out correctly and that there would be no discernible change in nitrogen deposition rates beyond 150 m of the road edge. The RHS has clearly shown that the in-combination impacts are greater than 1% at all distances (see the RHS' tables in REP11-040 and text on page 5 of REP11-038). In addition, Highway England was wrong to confine its assessment to areas of the SPA beyond 150m from the road (see REP12-058).

Section 3.7 Summary of HE's key points regarding air quality and the SIAA	
Highways England Text in REP12-024	**RHS Response**
minimum', the Scheme actually leads to a decrease in nitrogen deposition rates at the two transects on the A3, as a result of a reduction in congestion on the A3 with the Scheme;	
13.7.2 (10) The established woodland is a buffer between the A3 and M25 and the heathland. As explained in their response to ExQ2 2.4.7d [REP5-032], Natural England do not require the conversion of this woodland to heathland in order to achieve favourable condition for this component part of the Thames Basin Heaths SPA. Furthermore, Natural England explain in this response that the role of this established woodland is to provide a buffer between the road and the heathland habitats, dispersing vehicle emissions away from the heathland;	Highways England states that Natural England does not *"require the conversion of this woodland to heathland in order to achieve favourable condition for this component part of the Thames Basin Heaths SPA"*. This conflicts with (i) the Wisley and Ockham Management Plan 2010-2020 which makes clear the plan to clear woodland in certain parcels of land between 2010 and 2020 (see Baker Consultant Ltd's Figure 1 (REP11-042)); and (ii) Natural England's Supplementary Advice on the SPA (REP5-034) which confirms that delivery of the Management Plan is tied into the conservation objectives for this SPA (see paragraphs 41-42 of Freeths LLP's REP12-056).
3.7.2 (11) The heathland is the supporting habitat for the SPA qualifying species. Highways England has demonstrated that none of the SPA qualifying species use the established woodland buffer. The SiAA identified an adverse effect as a result of physical loss of established woodland, based on the precautionary approach that this could reduce the overall invertebrate resource of the SPA. This is based on the assumption that the complete clearance of 14.6 ha of woodland (5.9 ha permanent and 8.7 ha temporary) would result in the complete loss of invertebrates from this area. However, as explained the response to question 4.4.13 on pages 16-18 of Highways England's comments to Deadline 10 submissions [REP11-007], it is considered highly likely that the existing 78 ha of heathland provides sufficient invertebrate resource to support the SPA qualifying species that are currently present. The consideration of the physical loss of established woodland potentially resulting in reduced invertebrate resource for the SPA is purely a precautionary approach;	Highways England again errs. See for example the comments regarding the CJEU's *Holohan* decision above

Section 3.7 Summary of HE's key points regarding air quality and the SIAA	
Highways England Text in REP12-024	**RHS Response**
3.7.2 (12) As explained in response to ExQ4 4.4.13 [REP10-004] and also in the response to question 4.4.13 on pages 16-18 of Highways England's comments to Deadline 10 submissions [REP11-007], the invertebrate assemblage of the established woodland buffer has established under existing conditions. There will be no changes in the invertebrate resource (assemblage or biomass) within the woodland buffer as a result of air quality changes from the Scheme, because the nitrogen deposition rates for all transect points within the established woodland buffer (and heathland) all fall below the current baseline, and therefore the established woodland buffer will continue to function in the same way as it currently does and provide the same invertebrate resource it currently does. It is noted that RHS have agreed with the assessment that all nitrogen deposition rates for all transect points will fall below the current baseline (paragraph 6 of their response to REP10-003 [REP11-037], where RHS states "RHS agrees with HE that, based on RHS's own results Table referred to in paragraph 6 above, which takes into account the "ammonia proxy", the operational nitrogen deposition rate falls below current baseline levels for every transect point within the SPA");	This commentary from Highways England also incorrectly ignores the fact that: 1, (see paragraph 83.5 of REP12-056) the additional nitrogen to be deposited on the SPA woodland in 2022 by the DCO Scheme at transects 1, 3 and 4, both alone and in combination with other plans and projects, as compared with where the DCO Scheme does not proceed, are significant and take the SPA further away than would otherwise be the case from the required critical load of 10 kg N/ha/yr which the SPA's conservation objectives targets (RE5-034) require the SPA to be at or below; and 2. (see paragraph 83.6 of REP12-056 (83.6.1-83.6.13)) there are numerous gaps in the evidence presented and these gaps show that there is insufficient evidence to support a conclusion of no adverse effect on site integrity from air quality impacts on woodland invertebrates.
3.7.2 (13) The SiAA ruled out an adverse effect on the integrity of the SPA as a result of air quality changes because: a) The Scheme will lead to no discernible effects on nitrogen deposition rates within the habitats upon which the SPA qualifying species rely (i.e. the heathland), and; b) The established woodland buffer that separates the heathland from the A3 and M25 will receive lower nitrogen deposition rates than it currently does, and will continue to function in the same way and provide the same contribution to the invertebrate resource as it currently does.	Highways England's approach to assessment the impacts on the woodland within the so-called buffer zone is incorrect (see comments above and REP12-056)

Section 3.7 Summary of HE's key points regarding air quality and the SIAA	
Highways England Text in REP12-024	**RHS Response**
3.7.2 (14) The assessment and findings align with the Compton case, which also considered changes in air quality that were confined to the woodland buffer and determined that the air quality assessment should focus on the SPA birds and their habitats. On the legal issues raised by Freeths solicitors on behalf of RHS at deadline 6 [REP6-024], see Highways England's comments at Appendix A of REP7-008 which contains counsel's opinion (Michael Humphries QC) on the issues raised;	In relation to the *Compton Parish Council* decision, the RHS has explained exactly why that case is not applicable in the present circumstances. Please see paragraph 89 of Freeths LLP's REP12-056 which sets out the reasons why *Compton* does not apply here. The RHS notes that Highways England has consistently failed to engage with those reasons, even though they were previously presented by Freeths LLP in paragraph 38 of REP6-024.
3.7.2 (15) The RHS alternative requires more land take from the SPA than the Scheme and therefore is not a better alternative to the Scheme with regard to an adverse effect on the integrity of the SPA. Moreover, it does not meet the relevant design standards;	This is incorrect. See paragraphs 94-149 of Freeths LLP's "RHS Submissions on the DCO Scheme in relation to Regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017" (REP12-056).
3.7.2 (16) In summary, as demonstrated in the SiAA [REP4-018] and the DCO examination submissions listed above, the only adverse effect on the integrity of the SPA as a result of the Scheme is as a result of physical land take. Appropriate compensation in that regard has been identified and agreed with Natural England, RSPB, Surrey Wildlife Trust, Surrey County Council and Forestry Commission. All of these parties are satisfied with, and supportive of, the proposed compensatory measures;	3.7.2 (16): This is incorrect. Air quality is also a pathway of impact in relation to which the Secretary of State cannot conclude "no adverse effect on integrity". Furthermore, Highways England's compensatory habitat is also inadequate and invalid, see paragraphs 150-196 of Freeths LLP's "RHS Submissions on the DCO Scheme in relation to Regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017" (REP12-056).
3.7.2 (17) Highways England has set out clear reasoning as to why the Scheme will lead to no adverse effect on the SPA as a result of changes in air quality. Highways England is confident that sufficient evidence and justification has been provided to the ExA throughout the DCO examination in order to allow the ExA to undertake its own appropriate assessment, and indeed to make a recommendation to the SoS with regard	See the RHS' comments above. The RHS has seen nothing in the Highways England responses in REP12-024 that invalidates the evidence put to the DCO Hearings.

Section 3.7 Summary of HE's key points regarding air quality and the SIAA	
Highways England Text in REP12-024	**RHS Response**
to the HRA that aligns with the findings of Highways England, as well as the Compton judgement and the responses of Natural England.	

Section 3.8 RHS Response to HE-NE-SWT responses to ExQ4 (REP11-038)	
Highways England Text in REP12-024	**RHS Response**
3.8.1 *Comment on question 4.3.1* Highways England has not undertaken the calculations as the emissions factors in Defra's Emissions Factors Toolkit are applicable to traffic data and speeds that are entered for a minimum 1-hour period rather than shorter periods such as seconds which would be required for calculating the emissions from these suggested scenarios.	The RHS reiterates its response as set out in REP11-038. *HE has not directly answered this question. HE has failed to calculate the full range of vehicle emissions for (a) and (b) and scenarios (1) – (6) as requested by the ExA. HE should be readily able to use Defra's Emission Factor Toolkit (EFT) and the traffic data (flows and speeds) for the links used in the air quality modelling (which cover scenarios (1) to (6)), to address the ExAs question in full.* The RHS adds that Highways England could have provided helpful responses using 1-hour flows and speeds.
3.8.2 *Comment on question 4.3.2* The method for assessment of air quality was discussed and agreed with Natural England [APP-050, para 5.5.1, and REP2-014, response to point REP1-038-5]. The response provided by Natural England should be taken to be a general comment and is consistent with its own guidance [REP10-029, paragraph 2.1]. It does not, as RHS imply, mean that this Scheme assessment must consider ammonia emissions. This point has been agreed with Natural England [REP8-022].	For the first part, the RHS reiterates its previous response as set out in REP11-038. *The RHS provided a response to the ExA in REP10-025 that addressed how emissions might change over time, for both ammonia and NOx emissions, including the provision of graphs.* *The HE response on the other hand makes no attempt to address the ExA question on the emission types that might change, nor to provide graphs of how emissions may change over time.* For the second part, this is Highways England's interpretation of Natural England's response. The RHS stands by its view that Natural England is making clear that ammonia is a key pollutant and as such it is entirely appropriate for the RHS to expect it to be included in the assessment.

Section 3.8 RHS Response to HE-NE-SWT responses to ExQ4 (REP11-038)	
Highways England Text in REP12-024	**RHS Response**
3.8.3 Comment on question 4.3.3 RHS has raised four points to which Highways England note: 1) Highways England has provided the data as requested by the ExA at ExQ4 for the receptors within 150 m of the road including the ammonia contribution. 2) The results were not requested to be presented as a change in relation to the critical load, nor was this information presented in REP8-022. 3) The ammonia contribution was not considered for receptor points beyond 30 metres from the road due to the concentrations at these distances being indistinguishable from background concentrations [REP11-007, para 6.1.30]. This is considered a reasonable scientific basis upon which the decision was made and is consistent with the concept that ammonia has a higher deposition velocity than NO2, thus atmospheric concentrations will reach background levels within a shorter distance from the source of emissions. 4) The results presented in REP10-007 can be considered to be reliable and have been produced using a standard published methodology, with an adapted approach to account for ammonia. As noted in email correspondence to Duncan Laxen (on 8th, 11th and 17th June 2020), the difference in Transect 4 can be attributed to the heavier congestion during the peak periods in the base year, than in the do-minimum, which results in lower concentrations in the do-minimum than for the 'do-nothing' scenario. 3.8.4 Traffic congestion at the two to one lane merge on the southbound on-slip is not only influenced by the changes in traffic flow on the slip road, it is also influenced by the volume of traffic leaving and joining it to and from Old Lane, which has a junction with the slip road immediately prior to the merge. Traffic volumes turning left from the slip road into Old Lane	With respect to **1**), The RHS considered it appropriate to present the full data set in one Table, even though not explicitly asked for, so as to make analysis easier. Therefore, the RHS provided this in REP11-040. For **2**), the RHS considered it appropriate to provide the results as a change in relation to the critical load, so as to help interpretation. The RHS therefore provided this in REP11-040. For **3**), the RHS is clear in its view that the Highways England approach of not including ammonia contributions beyond 30m is unscientific and it stands by the evidence presented to support this in REP10-025. For **4),** the response made by the RHS in REP11-038 makes totally clear that the result presented in REP10-007 (for transect 4) cannot be considered to be reliable, which is contrary to the view expressed by Highways England in its response. (subsequent paragraphs 3.8.4, 3.8.5 and 3.8.6 are part of (4), and are therefore covered in this response.) Finally, it is noted that Highways England does not challenge the RHS's re-writes of paragraph 7.2.50 in REP4-018 using the corrected information. The SoS should therefore rely on these re-written paragraphs (from REP11-038 page 5), namely for the 'scheme alone': *These assessments have demonstrated that the potential for increases in nitrogen deposition greater than 1% of the critical load due to operation will be restricted to a bit more than the first 75 m from the edge of the road for Transect 4 and a bit more than 25 m from the edge of the road for Transect 3. Increases in nitrogen deposition of more than 1% of the critical load are also seen out to a bit more than 100 m from the edge of the road for Transect 1, while in some locations nitrogen deposition will be reduced when compared against the no Scheme 2022 scenario."*

Section 3.8 RHS Response to HE-NE-SWT responses to ExQ4 (REP11-038)	
Highways England Text in REP12-024	**RHS Response**
increase in the DM scenario compared to the 2015 Base and traffic volumes joining the slip road from Old Lane reduce in the DM scenario compared to the 2015 Base. Consequently, there is less traffic merging on the slip road south of the junction with Old Lane. This is combined with the overall reduction in traffic flow on the slip road in the DM scenario compared to the 2015 Base, albeit a relatively small reduction, explains why traffic congestion on the slip road is reduced in the DM scenario compared to the 2015 Base. In addition, once the capacity of a merge or junction is exceeded, even small increases in traffic demand will cause exponential increases in congestion and delay. Conversely, a relatively small reduction in traffic demand is sufficient for the merge to operate within capacity, removing congestion and delay and allowing free-flow conditions. 3.8.5 It should also be noted that the heavy congestion speed band category when applied to a motorway is applicable for speed ranges under 30 kph 3.8.6 The response to AQCs note is provided below under the response to Appendix 3. It should be noted that the findings do not make a substantive contribution to the evaluation of ecological impacts, and that the approach adopted does not follow standard DMRB guidance.	and for the 'scheme in combination with other plans and projects': *"These assessments have demonstrated that the potential for increases in nitrogen deposition greater than 1% of the critical load due to operation of the scheme alone will be restricted to a bit more than the first 75 m from the edge of the road for Transect 4 and a bit more than 25 m from the edge of the road for Transect 3. Increases in nitrogen deposition of more than 1% of the critical load are also seen out to a bit more than 100 m from the edge of the road for Transect 1, while in some locations nitrogen deposition will be reduced when compared against the no Scheme 2022 scenario. The in-combination assessment shows increases in nitrogen deposition greater than 1% of the critical load for all locations across the SPA (once the error in Transect 4 Do Nothing data is corrected for)."* The RHS therefore recommends that the SoS take these re-writes as the basis for reaching conclusions on the impacts on the SPA.
3.8.7 Further comment on the SiAA is provided above in section 3.2.	This comment by Highways England does not seem to be right. Section 3.2 in REP12-024 does not deal with the SiAA, but deals with compensatory measures.

Section 3.10 Appendix 2 – Table A – In combination Impacts - HE REP10-007 corrected by RHS (referenced at 4.3.3)	
Highways England Text in REP12-024	**RHS Response**
3.10.1 Comments on the SIAA are provided above in section 3.2.	This comment by Highways England does not seem to be right. Section 3.2 in REP12-024 does not deal with the SiAA, but deals with compensatory measures

Section 3.11 AQC note (references at 4.3.3)	
Highways England Text in REP12-024	**RHS Response**
3.11.1 The AQC note (REP11-041) purports to test the results presented by Highways England with regard to the in-combination change in nitrogen deposition for Transect 4. 3.11.2 The modelling results presented by Highways England follow the standard methodology as set out in the DMRB guidance HA207/07 (now LA105) and documented in REP10-004 (point 4.4.16) and are correct. The method was discussed and agreed with Natural England [APP-050, para 5.5.1 and REP2-014, response to point REP1-038-5]. 3.11.3 It is not surprising that the NOx modelling results produced by AQC are different, given that there are a large number of input parameters which are used in modelling (as discussed in APP-050 section 5.6). It is possible that AQC have used different emission factors from the Applicant. As documented in the air quality chapter of the ES (APP-050, 5.5.17), the air quality assessment for the Scheme used the speed band methodology in IAN 185/15, together with speed band emission factors based on Defra's Emissions Factors Toolkit (EFT) v8. If AQC used the older emission factors provided in IAN 185/15, this would give rise to lower results in heavily congested periods, and may explain the comparatively lower	The RHS has reviewed the comments of Highways England on its REP11-041 Note. Highways England appears not to have understood the methodology set out clearly in the Note. It's challenges to the Note are wrong and therefore the findings set out in the Note still stand. This Note should be read along with text in REP11-038 in the first two substantive paragraphs on page 5. In relation to 3.11.3, Highways England asserts that AQC may have used different emission factors from the Applicant. AQC used the published factors, which are the only ones publicly available. If Highways England used different factors, then these are unpublished factors that are only available to Highways England contractors. In relation to 3.11.4, AQC does not rely on the absolute values, so these comments on roughness length affecting concentrations are irrelevant. In relation to 3.11.5, comparison of Table 3.1 in REP12-024 with Table 1 in REP11-041 clearly demonstrates the difference in the Highways England modelling and that carried out by AQC for NOx concentrations in the DN and DM scenarios along transect 4. For instance, at receptor R149 Highways England showed the DM NOx

Section 3.11 AQC note (references at 4.3.3)	
Highways England Text in REP12-024	**RHS Response**
concentrations presented in the "do nothing" scenario (Table 1, REP11-041) compared with the Do Minimum scenario. For example, the emission factor for a heavy duty vehicle in 2022 on a heavily congested motorway is 0.36 g/km in IAN 185/15 (published in 2015), but updated to 4.123 g/km for the updated speed band emission factors used by Highways England and based on EFTv8. 3.11.4 There are other input parameters which can make a difference such as the surface roughness length used for the study area. Atkins used 0.5 m, representative of the wider air quality study area, while AQC used 1.0 m, which is appropriate for woodland. Generally, the higher the surface roughness value, the more mixing of air that occurs leading to greater dispersion and lower pollutant concentrations. Using a surface roughness of 0.5 m, as Atkins did, would therefore be expected to lead to higher modelled concentrations. 3.11.5 AQC have not followed the Highways England method as set out in REP10-004 point 4.4.16, but have instead attempted to calculate nitrogen deposition rates using a non standard method by applying various ratios derived from the raw (unadjusted) modelled NOx road contribution. The AQC approach has not accounted for the fact that in the standard DMRB approach, nitrogen deposition is derived from NO2, rather than NOx (as set out in REP10-004 point 4.4.16), and consistent with the deposition velocity which is for NO2 (consistent in HA207/07, LA105 and IAQM guidance). The application of the NO2 deposition velocity to a NOx concentration will give a higher result. 3.11.6 Different outputs at each stage of the calculations whether from the modelled NOx road outputs, total adjusted NO2, or total nitrogen	concentration being 81.8% of the DN value, while the AQC modelling showed the DM NOx concentration being 99.2% of the DN value. AQC then demonstrated in REP11-041 how its modelling results would translate into nitrogen deposition changes (by adjusting the Highways England nitrogen deposition values). The AQC results showed significant in-combination impacts along transect 4, which were much closer to those of the other transects. This re-modelling by AQC, together with the concerns raised by the RHS in REP11-038 on pages 3 to 5 as to the speeds used by Highways England to model the southbound on-slip to the A3, is why the RHS doubts the validity of the in-combination results for transect 4 as presented by Highways England. The RHS therefore advises that the in-combination result for nitrogen deposition along transect 4 should be treated as being similar to those along the other transects, i.e. there are significant in-combination impacts.

Section 3.11 AQC note (references at 4.3.3)	
Highways England Text in REP12-024	**RHS Response**
deposition rates will all give different ratios – as shown in in the tables below. **Table 3.1 Ratios derived from modelled road NOx** *(Table not reproduced here)* **Table 3.2 Ratios derived from total nitrogen deposition rates** *(Table not reproduced here)* **Table 3.3 Ratios derived from total adjusted NO2 concentrations** *(Table not reproduced here)* 3.11.7 It would appear that the AQC derived ratios have also been incorrectly applied in the subsequent step. AQC calculated a DS/DM ratio from the road nitrogen deposition rates from the Highways England results (which as described above, were calculated using the standard DMRB method and use an adjusted road NO2 concentration). AQC have applied this ratio to their calculated total nitrogen deposition rate for the Do Minimum scenario (from a non-standard method and using an unadjusted NOx concentration) to calculate a result for the Do Something scenario. Were such an approach to be appropriate, which is not Highways England's position, AQC should have applied the ratio to their calculated road nitrogen deposition rate for the Do Minimum result and then added on the background nitrogen deposition component. Applying the ratio to the road nitrogen deposition rather than the total nitrogen deposition rate would have given a different result. 3.11.8 The ratios that AQC have applied are therefore incorrect and the resultant calculations of nitrogen deposition rates are not considered to be based on a valid approach. The findings, regardless of the inaccuracies in the approach, do not make a substantive contribution to the evaluation of the ecological impacts. The results presented by AQC for transect 4, in	In relation to 3.11.7 and 3.11.8, AQC did not carry out the calculations incorrectly. It applied the ratios to the road nitrogen deposition and then added on the background deposition. This criticism is incorrect, and the results are based on a valid approach.

Section 3.11 AQC note (references at 4.3.3)	
Highways England Text in REP12-024	**RHS Response**
Table 3 of the AQC note (REP11-041) show that at the location of the supporting habitats for the qualifying features within the SPA (at locations over 150 metres away from the road), the difference in the percentage changes is small (-2.1% to 0.9%) and unlikely to lead to a discernible difference in total nitrogen deposition rates. 3.11.10 As acknowledged by RHS REP11-037 para 6] all nitrogen deposition rates are lower in the opening year than in the base year, as a result of the overall future downward trend in NOx emissions. Any change as a result of the Scheme will be small in comparison to the reductions in future years, and in respect of improvements in NOx concentrations in recent years to date.	

Section 3.12 RHS Response to REP10-003	
Highways England Text in REP12-024	**RHS Response**
3.12.1 Highways England has provided the data as requested by the ExA at ExQ4 for the receptors within 150 metres of the road including the ammonia contribution within 30 metres. RHS has previously accepted that doubling the NOX derived contribution would provide a conservative estimate of the ammonia contribution to nitrogen deposition [REP10-025 point 4.4.8] and this approach was also adopted by AQC in their note [REP11-041, 2.4].	The RHS wishes to clarify that by 'conservative estimate' it means that the contribution in practice is likely to be more, not less. It would seem that Highways England is incorrectly, in this case, interpreting it as meaning the contribution is likely to be less.
3.12.2 The ammonia contribution was not considered for receptor points beyond 30 metres from the road due to the contribution from road traffic	The RHS has made clear in REP10-025 (ExQ4 question 4.4.19) why this makes no scientific sense.

Section 3.12 RHS Response to REP10-003	
Highways England Text in REP12-024	**RHS Response**
to ammonia concentrations at these distances being indistinguishable from background concentrations [REP11-007, para 6.1.30 and para 6.1.54].	
3.12.3 The relevant issue is the extent to which the changes with the Scheme affect the supporting habitats of the qualifying features, to which the conservation objectives are applicable [REP7-008, paras 2.2.51 to 2.2.52]. At the distance at which the supporting habitats occur with the Scheme, the changes with the scheme compared with the "do nothing" are all small (less than 0.3 kg N/ha/yr, at R163, [Table A of REP11-040 and Table 4 of REP8-022]).	The RHS has made clear that the conservation objectives do not just apply beyond 150m - see REP12-056, in particular paragraphs 36 – 71.
3.12.4 In any case, as RHS acknowledge [REP11-037 para 6] all nitrogen deposition rates are lower in the opening year than in the base year, as a result of the overall future downward trend in NOx emissions [REP7-008, para 2.2.54, and REP2-013 point 1.4.5].	It is accepted that this will be the case, but they will still be above the critical load.